

Municipal Facilities Operation & Management:

2.1.3 Landfills

2.1.3.1 Introduction

This program component is applicable to the Environmental Services Department that operates and manages the active and inactive municipal landfills within the City of San Diego.

The West Miramar Landfill is located within the City of San Diego on the southwestern portion of the Marine Corps Air Station Miramar. The landfill is located within an 811 acre parcel of federally owned property of which approximately 476 acres has been designated for refuse fill. The Environmental Services Department operates the landfill under a lease from the U.S. Government through the Department of Navy.

Landfill operations at Miramar have occurred in three separate areas known as: South Miramar Landfill, North Miramar Landfill and West Miramar Landfill. Refuse disposal operations began in 1959 at the South Miramar Landfill and ceased operations in 1973. The landfill operations at the North Miramar landfill were conducted from 1973 to 1983. The West Miramar Landfill is currently accepting waste and has been since 1983. The West Miramar Landfill operated under a grant of easement from its opening to September, 1995 and now it is under a 50-year lease expiring in 2045. This lease will allow the capacity of the site to be fully utilized through its expected closure in the year 2012 and retain at least a 30-year post-closure period.

The West Miramar Landfill was and continues to be operated as a Class III (formerly Class 2-II) refuse disposal facility as classified by Title 27 of the California Code of Regulations. The site serves the entire City of San Diego as its only active landfill. The site currently receives an average of 3,800 tons of waste per day 361 days a year. The West Miramar Landfill consists of two fill areas known as Phases I and II. Filling operations have been substantially completed in the Phase I area and are currently being conducted in the Phase II area. Site operations are governed by the existing Solid Waste Facility Permit issued in 1997 by the California Integrated Waste Management Board and the existing Waste Discharge Requirements issued by the California Regional Water Quality Control Board in 1987 and amended in August 1993 by Order No. 93-86.

Superior Rock Products, Hawthorne Machinery, and Minnesota Methane concurrently use the site due to their direct involvement with landfill operational activities. Superior Rock Products operates a rock extraction and processing operation, excavating the rock bearing materials within the landfill footprint in areas of future landfiling operations.

Hawthorne Machinery maintains the heavy equipment the City leases from them for landfill operations. Minnesota Methane operates and maintains a landfill gas extraction system to supply its co-generation plant with methane.

Other activities at the Miramar Landfill include the Load Check Operations that collects unacceptable wastes; greenery recycling that conducts mulching and grinding activities; native plant nursery that grows plants for landfill revegetation projects, and the Recycle Center operated by Allan Company that collects recyclable wastes.

Table 2.1.3-1. Permit Requirements – Landfills.

| Section | Requirement (Summary) | Permit Section |
|----------------|--|---------------------------|
| 2.1.3.2 | Implement pollution prevention methods where applicable | F.3.a.(1) |
| 2.1.3.2 | Include active and closed municipal landfills as a high priority municipal activity | F.3.a. (3)(b)iv |
| 2.1.3.2 | Designate and implement minimum BMPs to protect water quality | F.3.a.(4) |
| 2.1.3.2 | Implement and designate BMPs to reduce pollutant discharge from pesticides, herbicides and fertilizers | F.3.a.(6) |
| 2.1.3.2 | Inspect areas and activities annually | F.3.a.(7) |
| 2.1.3.2 | Comply with City of San Diego Storm Water Ordinance | F.3.a.(8) |
| Education | Implement and designate a Residential Component to prevent or reduce pollutant discharge | F.3.d. |
| 2.1.3.2 | Implement and designate an Educational Program for all pertinent target communities | F.4.a. F.4.b. F.4.c |
| 2.1.3.3 | Develop a budget for storm water expenditures for each fiscal year covered by the Municipal Permit | F.8 |
| 2.1.3.4 | Document activities for Jurisdictional Urban Runoff Management Program Annual Report | I |

The objectives of this program component are to:

- Meet or exceed all applicable regulatory requirements and City of San Diego Storm Water Ordinance.
- Continue to comply with the Storm Water Pollution Prevention Plans associated with each of the permitted industrial facilities (active and inactive landfills), to, continue to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facilities;
- Continue to identify and implement site-specific storm water best management practices (BMPs) to reduce or prevent pollutants, associated with industrial activities, in storm water discharges and authorized non-storm water discharges.
- Continue to identify and implement site-specific storm water best management practices (BMPs) to reduce or prevent pollutants, associated with the use of pesticides, herbicides, and fertilizers.

- Continue to develop and implement education and training programs for Environmental Services Department staff.
- Continue to develop and implement an education program for all pertinent target audiences.
- Continue to budget for and implement the associated estimated costs needed to maintain the Landfill component through the five-year life of the Municipal Permit.
- Continue to document storm water pollution prevention activities conducted at the landfills, and submit annually to the Storm Water Pollution Prevention Program along with an annual activities report.

2.1.3.2 Activities

In order to effectively implement the development regulation changes, development review procedures and education and training outlined below, the Environmental Services Department shall maintain a designated coordinator or coordinators to maintain a working understanding of the Municipal Permit so that he/she can provide guidance to department management and staff in implementing the Landfill Component of the Urban Runoff Management Plan. The name(s) of the coordinator shall be submitted to the Storm Water Program by Thursday, February 21, 2002—the Urban Runoff Management Program implementation date. The Environmental Services Department shall provide the names of new representatives whenever the designated coordinator is replaced. The Storm Water Program will interact with the coordinator(s) to provide the latest Municipal Permit information and to request annual compliance reports from the Environmental Services Department.

The Environmental Services Department provides the services listed below related to the operation and maintained of solid waste disposal facilities. The Department maintains a post-closure maintenance and regulatory compliance plan to ensure compliance with federal, state and local landfill regulations for active and inactive landfills

Storm Water Pollution Prevention Plan

This facility is permitted under the General Industrial Storm Water Permit, Order No. 97-03 – DWQ. This permit requires the landfill to prepare a Storm Water Pollution Prevention Plan, retain it on site, and implement it. The purpose of the Storm Water Pollution Prevention Plan is to help identify the source of pollution that affect the quality of industrial storm water discharges and authorized non-storm water discharges and to describe and ensure the implementation of the Best Management Practices to reduce or prevent pollutants in industrial storm water discharges and authorized non-storm water discharges. The Storm Water Pollution Prevention Plan must be reviewed annually and revised as necessary to comply with all permit requirements.

Pollution Prevention

Active Landfill Operations

Staff maintains an environmentally secure, lined landfill, where the City's commercial, industrial and residential refuse is completely covered on a daily basis. Daily coverage of the active landfill keeps refuse from blowing out of the disposal area.

Load Check Operations

Load Check Operations include the inspection, investigation, and removal of hazardous and other unacceptable materials found being inappropriately disposed of by residential or commercial customers using the Miramar Landfill. Unacceptable wastes that are typically found by the inspectors include oils, paints, solvents, pesticides, and/or corrosive chemicals. When these hazardous wastes are identified, staff attempts to determine the generator of the illegal wastes. If the generator is identified, that responsible party is contacted, educated on proper disposal, and directed to appropriate resources for proper disposal. If a generator is not identified, staff collects the wastes, packages and stores the wastes in a contained storage unit, and has a licensed hazardous waste hauler properly dispose of those wastes. (For more details refer to the Load Check Operations section of this document)

Industrial Activities and Best Management Practices

- *Fueling:* Fueling (diesel fuel) of the heavy equipment is performed on an on-going basis by City staff from a 5,000-gallon tanker. A quick-fuel system using an aircraft grade Wiggin's nozzle is used to prevent spillage. This system will not allow fuel to be dispensed until the nozzle is securely locked to the fuel inlet nipple. Operations staff keeps an extra nozzle on-site in the rare event that a malfunction occurs. Should a spill occur because of such a malfunction, the area is bermed-up and cleaned up by trained staff.
- *Equipment Maintenance:* The landfill heavy equipment is maintained by Hawthorne Machinery Company on bare ground. Any release due to a spill will be cleaned up by removing the contaminated soil. All regulated fluids are stored in double containment structures.
- *Preventative Maintenance:* The Local Enforcement Agency and the Regional Water Quality Control Board regulate activity at the West Miramar Landfill through enforcement of the Clean Water Act and other regulations. By continuing to maximize existing Best Management Practices and implementing additional controls we will satisfy these requirements.

These Best Management Practices include:

- Increasing the mulch application on intermediate cover areas and stockpiles;
 - Enlarging and improving the sedimentation basin;
 - Pumping down the basin between storms;
 - Procuring soil tackifier for application in various areas;
 - Installing drainage appurtenances e.g., wattles, chevrons, regular and triangular silt fencing and additional down drains;
 - Acquiring a Low Ground Pressure tractor to allow repairs after rain events in areas too wet for conventional equipment; and
 - Hiring a contractor to evaluate the installation of a treatment works at the siltation basin.
- *Pesticides, Herbicides and Fertilizers:* Staff is responsible for the maintaining the open space, roadways and other grounds of the landfills using integrated pest management techniques. Pesticides, herbicides and fertilizers are rarely used.
 - *Traffic Control:* Staff establishes a daily traffic control plan to direct commercial, residential and public customers to their respective unloading areas. Traffic control activities ensure all refuse is disposed of in the correct location and then properly compacted and covered at the end of each workday.
 - *Street Sweeping:* The paved roadways at the landfill use areas and entrance are swept on a regular basis. The frequency of the sweeping is increased during inclement weather to address the increased level of landfill soil tracked onto the roadways from vehicles leaving the landfill.

Active Landfill

West Miramar Landfill
NPDES Permit - WDID# 9-37S005556
Operation Dates: April 1983 to present

The West Miramar Landfill covers an area of 811 acres which approximately 476 acres is permitted for landfilling. Phase I operations began in 1983. Waste Discharge Requirements (Order 87-54) were issued on June 15, 1987. A groundwater monitoring system, consisting of ten groundwater wells and three leachate wells, to monitor both the North and West Miramar Landfills is sampled quarterly. West Miramar Landfill is operated as a Class III solid waste disposal site receiving municipal solid waste. The types and approximate amounts of waste disposed are estimated to be: 50% paper, 30% putrescibles, 15% miscellaneous, and 5% metals. No disposal of hazardous or toxic substances is authorized.

Inactive Landfills

South Chollas Landfill

NPDES Permit - WDID# 9-37S003312

Operation Dates: October 1951 to September 1981

Area: 120 acres

Tonnage: 4,750,000 tons

Volume: 8,300,000 cyds.

The South Chollas Landfill operations began in the western portion of the site and progressed to the east. The canyon method of landfilling was the primary method used. North-South trending canyons were filled to create a relatively flat upper surface with a high south-facing slope. The South Chollas Landfill was designated as a Class-II-1 (now known as Class III) site. Native soil from the general landfill area was used for the landfill cover. The average thickness of the existing cover is 3 feet. Portions of the landfill are covered with vegetation, including short grasses, sparse brush, small and large trees. A small portion is improved with asphalt to serve as a parking lot for the adjacent operations yard. At the present time there is no activity on the site that requires a permit. Waste accepted at the landfill consisted of 60% municipal refuse, 30% commercial refuse, and less than 10% demolition materials. No industrial chemical or liquid wastes were accepted.

Arizona Street Landfill

NPDES Permit - WDID# 9-37S005768

Operation Dates: August 1952 to December 1974

Area: 65 acres

Tonnage: 1,938,000 tons

Volume: 3,400,000 cyds.

The Arizona Street Landfill lies entirely within San Diego's Balboa Park. This landfill was operated as a Type II (Class III under current classification) solid waste disposal site receiving 90% municipal solid waste and 10% construction demolition debris. There is no evidence the site was used for disposal of industrial or hazardous waste, septic or sewer sludge. Cover material was brought in from areas throughout the City. The average thickness of the existing cover varies from 7 to 16 feet. For the past several years, the Park and Recreation Department has operated an operations yard on the landfill that includes an equipment maintenance facility for minor repairs, parking, offices, and equipment storage.

Mission Bay Landfill

NPDES Permit - WDID# 9-37S005784

Operation Dates: July 1952 to December 1959

Area: 130 acres

Tonnage: 2,280,000 tons

Volume: 4,000,000 cyds.

The City operated the Mission Bay Landfill. The trench method was used for disposal of the waste. Trenches were approximately 60 feet long and 15 feet deep. These trenches were often 5 to 10 feet below the water table. The landfill accepted municipal waste as well as some hazardous waste. The major components of the landfill were wood, paper, glass bottles, tires, cans, and green waste.

Following cessation of the landfill operation, the landfill was used as a disposal site for hydraulic fill generated in the original dredging of Mission Bay. A 5 to 20 foot thickness of saturated, fine-grain sandy silt was placed over the landfill and adjacent areas. The dredging continued until 1962.

South Miramar Landfill
NPDES Permit - WDID# 9-37S005785
Operation Dates: December 1959 to May 1973
Area: 192 acres
Tonnage: 2,500,000 tons
Volume: 4,200,000 cyds.

In 1959, the U. S. Navy leased 446 acres of property to the City of San Diego. Landfilling operations began in December 1959. The method of landfilling had been to fill in portions of the tributaries to San Clemente Canyon. The site primarily received municipal refuse, however previous reports have noted the possibility of one to seven million gallons of various liquid industrial wastes were received between 1959 and 1967. In 1967, the City formally announced that industrial wastes would no longer be accepted for disposal at the site. The South Miramar Landfill was designated as a Class II-2, 3 (now known as Class III) site. Native soil from the general landfill area was used for the landfill cover. The existing cover thickness ranges from 1.5 to 5 feet. Portions of the landfill are covered with vegetation, including short grasses and sparse brush. At present, there is no activity requiring a permit on the site.

North Miramar Landfill
NPDES Permit - WDID# 9-37S005788
Operation Dates: May 1973 to June 1983
Area: 260 acres
Tonnage: 9,750,000 tons
Volume: 16,200,000 cyds.

The North Miramar Landfill began operation in May 1973 following termination of operations on South Miramar Landfill. This landfill was operated as a municipal landfill; no disposal of hazardous or toxic substances was authorized. Wastes received, included, 50% paper, 30% putrescibles, 15% miscellaneous, and 5% metals. Groundwater monitoring and reporting for the site is performed concurrently with the requirements for West Miramar. The North Miramar Landfill was designated as a Class

II-2, 3 (now Class III) site. Native soil from the general landfill area was used for the landfill cover. The average thickness of the existing cover is 3 feet.

Approximately 200 acres of the landfill has been covered with mulch to control erosion and promote revegetation. About 50 acres has been reseeded with native seed and another 75 acres has been revegetated with containerized native plants.

Routine Inspection and Cleaning, Review of Activities

The following self-inspections processes will be performed at landfill operation locations:

- Facilities will be inspected annually and cleaned as needed.
- Maintenance activities will be reviewed annually to verify that appropriate storm water BMPs and practices are being utilized.
- Report modifications and corrective actions identified during self-inspection to the Storm Water Program annually as part of the Program Assessment.

Twenty-Four Hour Non-Storm Water Discharge Reporting

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the Regional Board. A report will also be forwarded to the Storm Water Program for record keeping purposes. Non-storm water discharges that pose a significant threat to water quality or human health will be evaluated by City staff against the “24-Hour Non-Storm Water Discharge Reporting Checklist”. A significant threat to water quality or human health is determined on a case-by-case basis and will be dependent on the type of pollutant, the degree of the violation (i.e. the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Examples of discharges that will be reported include non-storm water discharges, such as a significant sediment load into adjacent waterways.

Where staff determines that discharges pose a significant threat to water quality or human health, the Storm Water Program or responsible City department will notify the Regional Board orally and by facsimile within 24 hours of the discharge event. Additionally, a written report of the event and follow up actions will be sent to the designated Regional Board contact for the Municipal Storm Water Permit, if needed, within 5 working days of the day the event was identified. A standard reporting form will be created by the Storm Water Program to be used by all City departments to facilitate consistency and maintain clear communication with the Regional Board. The report will contain the following information:

- Description of the event and its cause;
- Duration of the event;
- Time the event is expected to continue if it has not been corrected;
- Steps taken to correct the non-storm water discharge event.

Additional Operational Activities

- *Superior Rock:* Superior Rock Products operates a rock extraction and processing operation, excavating the rock bearing materials within the landfill footprint in areas of future landfilling operations. They are holders of a group NPDES permit (WDID No. 937S005166) and as such follow the established BMPs for such a site as rolling in loose materials with heavy equipment prior to a rain event, providing drainage structures and desilting ponds.
- *Hawthorne:* The landfill heavy equipment is maintained by Hawthorne Machinery Company on bare ground.
- *Minnesota Methane of San Diego, LLC:* The landfill gas extraction system is owned, operated and maintained by Minnesota Methane of San Diego, LLC. They fuel their co-generation plant with this landfill gas to generate electricity and thermal products. When conducting certain special activities such as drilling and trenching in refuse any exposed waste is covered with a minimum of six (6) inches of earth at the end of each working day. Under no circumstances is leachate or condensate from the landfill allowed to reach the surface where it may effect runoff water quality. These special construction activities are typically scheduled around wet weather.

Ancillary Activities

- *Household Hazardous Waste Transfer Facility:* Both the City and the private sector provide collection services for household hazardous waste (HHW). In 1999, a permanent household hazardous waste transfer facility (HHW transfer facility) was opened at the Miramar Landfill and now serves residents with weekly HHW disposal services. The HHW transfer facility accepts HHW used for the routine maintenance of a resident's home, yard and/or vehicle. (For more details refer to the HHW transfer facility section of this document)
- *Greenery Mulching:* Staff maintains a green and woods diversion area where greenery is processed into wood-chips, mulch and compost. These products are utilized at the landfill to prevent erosion and are available to businesses and the public.
- *Native Plant Nursery:* Staff catalogs indigenous plants and animals, grows native plants and re-vegetates closed landfill areas back to their natural state.
- *Recycling Center:* A recycling center at the entrance to the Miramar Landfill is operated by Allan Company and accepts most recyclable items. Recycling of these materials diverts these usable/reusable wastes from the Landfill.

Education & Training

1. Internal/Municipal Education:

The City of San Diego plans to conduct two levels of education and training for staff: General and Activity Specific. All staff will receive a basic introduction to the issue via a "General Storm Water" workshop created by the General Services Storm Water Pollution Prevention Program. Additionally, those departments or work groups that perform work activities specifically identified in, and affected by, the Permit will create, execute and fund Activity Specific training sessions to introduce new work processes, functions and behaviors that incorporate the Best Management Practices necessary for staff to prevent illegal discharges into the City's storm water collection and conveyance system and recreational waters. Additionally, the Departments will fund the External Education and Outreach elements in this plan. All education and outreach covered by the permit shall contain the phrase, "Another City of San Diego Think Blue Program protecting our beaches, bays and watersheds."

A) General Storm Water Training Provided By the Storm Water Program:

The General Storm Water workshops, while created by the Storm Water Program, are primarily being given by trainers to the staff of their respective departments. And, Items 2,3,4,5 and 6, below, are the educational materials created for the workshops. A "Train the Trainer" workshop was also created and given by the Storm Water Program (Item 7) to familiarize the trainers on the material and subject matter prior to rolling out the General Training workshop to their department staff.

Table 2.1.3-2. Storm Water Program General Training.

| ITEM | AVAILABLE |
|--|--|
| 1. Clean Water Leader/3-Cs BMP Reference Card | July 2001 |
| 2. General Storm Water Training Video | October 2001 To be completed by June 2002 |
| 3. City Employee Brochure | October 2001 |
| 4. Stop Pollution Pad | October 2001 |
| 5. Employee Knowledge & Behavior Survey. To be given before and after each General Storm Water Workshop by department trainers | October 2001 |
| 6. Frequently Asked Questions for department trainers | October 2001 |

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| | |
|---|-----------------------|
| 7. Train the Trainer Sessions. Training of department trainers on content and materials for the General Storm Water Workshops | September 10-14, 2001 |
| 8. Storm Water Newsletter | July/August 2002* |

** Note that Items 1 through 7 occurred in FY 2002 for citywide distribution, and that Item 8 is slated for Fiscal Year 2003 and reflects an estimated available date.*

B) Activity Specific Best Management Practices Training(s):

Table 2.1.3-3. Department Training Activities.

| ITEM | AVAILABLE* |
|--|---------------------------|
| 1. Identify needs, create and execute any additional Activity Specific education and training for on-site staff. | Complete by February 2003 |
| 2. Create Storm Water BMP Reference Binders for Staff | Complete by February 2003 |
| 3. Update BMP Reference Binders –periodic | June 2004 |
| 4. Train new employees on Storm Water activities. General and Activity Specific to be conducted by supervisor | New Employee Orientation |

** Note the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

2. External Education:

The external educational efforts as they relate to landfill activities are as follows:

Table 2.1.3-4. External Education.

| PUBLIC OUTREACH | |
|---|-----------|
| 1. Schools Program – Offer recycling and solid waste education to schools in a variety of formats. Activities include hosting an environmental fair for over 500 school children every April (Earth Month), providing on site technical assistance for schools, and sponsoring awards for the top environmental projects at the San Diego County Annual Science Fair Awards program. | Current |
| 2. Curbside Collection – Provide annual mailings describing the acceptable solid and recyclable wastes to residents participating in the automated residential curbside recycling program. This service is provided to 270,000 homes. | Current |
| 3. Landfill Information – Post signage at the entrance to the Miramar Landfill denoting acceptable wastes collected and include this information in the Landfill disposal fee schedule. | Current |
| 4. Greenery Wastes – Provide annual mailings describing the acceptable solid and greenery wastes to residents participating in the curbside greenery recycling program. This service is provided to 150,000 homes. Promote the permitted compost facility at the Miramar Landfill that accepts organic material such as landscaping debris, curbside greenery collection, and pre- and post-consumer food waste. | Current |
| 5. Miramar Recycle Center - Appliance Pilot. Annually update and distribute an appliance recycling guide showing all recycling locations. Implement an appliance recycling pilot in conjunction with Allan Co. at the Miramar Recycling Center to offer residents an opportunity to recycle old appliances. | July 2002 |

| BUSINESS OUTREACH | |
|--|---------|
| 1. Commercial Outreach – Provide solid waste technical assistance and education to the commercial sector in the form of waste audits, the development and publishing of case studies and brochures, an annual awards program, participation in trade shows, and broad media outreach. | Current |
| 2. Non-Exclusive Franchise Agreements – Promote landfill activities through language in City Council approved agreements to commercial waste haulers authorized to collect commercial refuse and other specified wastes in the city of San Diego. | Current |
| 3. Miramar Landfill Fee Schedule – Distribute the Fee Schedule and Regulations for the Landfill to educate users on what are acceptable and unacceptable wastes and their proper disposal. | Current |

2.1.3.3 Phasing

The Environmental Services Department complies with storm water regulations as part of the requirements for the General Industrial Storm Water Permits for the operation of the active landfill and maintenance of inactive landfills. These permit programs have required the implementation of storm water related activities and projects for several years. Training of appropriate staff has been performed and non-structural Best Management Practices are implemented in compliance with these permits. Based on the existing permits, Environmental Services does not have a phased approach to the Municipal Storm Water Permit.

2.1.3.4 Annual Assessment

The following form is representative of the quantitative and qualitative measures that will be tracked by the Storm Water Program regarding the Landfills component in order to prepare the Jurisdictional Urban Runoff Management Program annual assessment.

These assessment factors and questions are presented for information only; some questions may be modified prior to each annual assessment period, and not all of the factors or questions below may apply to each component's responsible department(s).

Prior to each fiscal year, a tailored Annual Assessment Form will be distributed to responsible departments, and will include an Excel spreadsheet containing direct and indirect quantitative and qualitative measures similar to the example below. The Storm Water Program will provide a blank copy of the Annual Assessment Form and additional guidance to department management prior to the beginning of each fiscal year. Submission of this report will require department director approval.

Program Assessment Form - Municipal Facilities Operations and Management - Landfills

QUANTITATIVE ASSESSMENT:

| Activity | Quantity | Units | Comments |
|---|-----------------|--------------|--|
| Number of high priority municipal facilities | | # | |
| Number of high priority municipal facilities targeted for inspection | | # | Due to calendar-year vs. fiscal year, staffing, budget, etc., as well as Permit Section F.3.b.(6)(d), the number of sites targeted for inspection may be less than the actual number of sites. |
| Number of high priority municipal facilities inspected | | # | Number of sites (not the number of inspections, which may or may not be the same). |
| Number of medium and low priority municipal facilities inspected | | # | See above. |
| Quantity of material removed from MS4 | | tons | direct measure; report in tons. |
| Quantity of debris removed that could have enter MS4 (i.e. street sweeping, litter removal) | | tons | direct measure; report in tons. |

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of this component over the past year.

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2. Summarize the educational and outreach activities conducted for this component over the past year to educate staff on water quality principles.

3. Summarize new activities or improvements to be implemented next year as a result of your self-assessment.

4. Other comments.

FINANCIAL ASSESSMENT:

Estimated annual storm water expenditures:

Personnel Expenditures: _____

Non-personnel Expenditures: _____

2.1.3.5 Appendix

Landfills Self-Inspection

The following SWPPP Checklist and Attachments are used during the Annual Comprehensive Site Compliance Evaluation, as well as throughout the year as a guide. They are included here to provide an overview of the details of the Landfill SWPPP program.

SWPPP Checklist

Storm Water Pollution Prevention Team

- 1) Y___ N___ Does your SWPPP list the storm water or SWPPP pollution team members?
- 2) Y___ N___ For each member of the team is the name, title, and identification of storm water compliance related responsibilities listed?

Site Map Requirements

- 3) Y___ N___ Is your SWPPP site map at least 8 _ x 11 inches or larger in size?

Is your SWPPP site map marked with the following information?

- 4) Y___ N___ The outline of all storm water drainage areas within the landfill boundaries?
- 5) Y___ N___ DNA___ Portions of site influenced by run-on from surrounding property?
- 6) Y___ N___ DNA___ Direction of the flow in each drainage area?
- 7) Y___ N___ DNA___ On-site surface water bodies?
- 8) Y___ N___ DNA___ Areas of soil erosion?
- 9) Y___ N___ DNA___ Nearby water bodies, such as streams, rivers, lakes?
- 10) Y___ N___ DNA___ Location of any inlets that receive site storm water runoff?
- 11) Y___ N___ DNA___ Location of storm water collection and conveyance systems?
- 12) Y___ N___ DNA___ Points of discharge off property (outfall locations)?
- 13) Y___ N___ DNA___ Direction of flow along each pipe or conveyance?
- 14) Y___ N___ DNA___ Location of any storm water structural controls, i.e. catch basins, berms, secondary containment, ponds, or oil water separators?
- 15) Y___ N___ DNA___ An outline of all impervious areas including buildings, paved areas and other roof structures?
- 16) Y___ N___ DNA___ Location where materials are exposed directly to precipitation?
- 17) Y___ N___ DNA___ Areas where spills have occurred?

- 18) Y___ N___ DNA___ Areas of industrial activities including: all storage areas, storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particle generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

Description of Significant Materials

- 19) Y___ N___ Does your SWPPP include the list of ALL significant materials handled and stored on site?

For each material handled or stored is the following information included in the SWPPP:

- 20) Y___ N___ Description of the material storage, receiving, and handling locations?
21) Y___ N___ Description of the material shipping, receiving, and loading procedures?
22) Y___ N___ Is the type, characteristic, and quantity of all site materials described?

Description of Potential Pollutant Sources (Industrial Activities)

- 23) Y___ N___ Does your SWPPP contain a narrative description of all industrial activities occurring at the site?
24) Y___ N___ Does the industrial activities narrative descriptions include the list of associated potential pollutants for that activity?

At a minimum, the following items related to industrial activities must be described when appropriate

Industrial Processes

- 25) Y___ N___ DNA___ For each site industrial process (i.e., equipment fueling) is the type, characteristic and quantity of material used described?
26) Y___ N___ DNA___ For each site industrial process, are the related activities such as cleaning, rinsing, recycling and disposal described?

Dust and Particulate Generating Activities

- 27) Y___ N___ DNA___ Are any activities that generate dust or particulate described in the SWPPP?
28) Y___ N___ DNA___ Is the location of the dust or particulate generating activity described?

- 29) Y___ N___ DNA___ Is the approximate quantity and characteristic of the particulate pollutant described?
- 30) Y___ N___ DNA___ Are the areas of deposition and associated discharge location (outfall) described?

Significant Spills and Leaks

- 31) Y___ N___ Does the SWPPP contain a record of significant spills or leaks of materials to the storm system?
- 32) Y___ N___ Does the spill and leak record contain the following information, type, characteristic, approximate quantity of material spilled along with the cleanup actions taken?
- 33) Y___ N___ Does the SWPPP contain information concerning the approximate remaining material that may impact the storm water discharge?

Non-Storm Water Discharges

- 34) Y___ N___ Is there a description of non-storm water investigation procedures in the SWPPP?
- 35) Y___ N___ Has the landfill been evaluated for the presence of non-storm water? (Inclusion or reference to the dry season outfall inspections completed each year would fulfill this requirement.)

Soil Erosion

- 36) Y___ N___ DNA___ Are areas of actual or potential soil erosion, associated with industrial activities or storm water discharges described in the SWPPP?

Description of Potential Pollutant Sources (continued)

The updated SWPPP must contain a summary table of industrial activities pollutant sources, potential pollutants, and BMPs associated with the industrial activity. See *Attachment I & II for Summary Tables to be completed and added to the SWPPP document.*

Assessment of Potential Pollutant Sources

- 37) Y___ N___ Does the SWPPP summarize the areas of the landfill that are likely sources of potential pollution to the storm water discharges? (For example, the fueling area, or outdoor material storage areas.)
- 38) Y___ N___ Does the SWPPP address which pollutants are likely to be in the storm water runoff? (An evaluation of the BMPs , handling and transfer

procedures, history of spills and leaks, and pollutant run-on should be considered when determining the likelihood of the presence of pollutants.)

Storm Water Best Management Practices (BMPs)

- 39) Y___ N___ Are appropriate structural (i.e. fuel kits or an oil water separator) and non-structural (i.e., designated indoor maintenance practices, employee training) BMPs described for each industrial activity and pollutant source at the site?
- 40) Y___ N___ Is there a discussion of the effectiveness of the BMPs in the SWPPP? (If the annual site inspection documentation is included in the SWPPP or referenced in the SWPPP, then the answer is “yes”.)
- 41) Y___ N___ Are any planned revisions to the BMPs documented in the SWPPP?
- 42) Y___ N___ Are any new BMPs to be implemented documented in the SWPPP?

Annual Comprehensive Site Compliance Evaluation (ACSCE)

The ACSCE is similar in purpose to the Annual Site Inspection requirements in the old storm water permit. However, the new evaluation requires a more in depth review of the landfill industrial activities and BMPs in place. The Evaluation includes the following:

1. A review of all the visual observations records, inspection records, and sampling and analysis results.
2. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
3. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, will be included.
4. The Evaluation report to the Regional Board includes:
 - Identification of personnel performing the evaluation.
 - The dates of the evaluation.
 - Necessary SWPPP revisions.
 - Schedule for implementing SWPPP revisions.
 - Incidents of non-compliance and the corrective action taken.
 - Certification that the landfill is in compliance with the new General Permit.

The Evaluation report is submitted as part of the annual report to the Regional Board. The evaluation documentation will be maintained in the landfill files for five years.

SWPPP General Requirements

The new permit requires that any violation or inadequacy in the landfill SWPPP be corrected with a revision to the SWPPP in a timely manner and in no case later than 90 days from the determination of the non-compliance.

Attachment 1

SWPPP Review Checklist Miramar Landfill

Potential Pollutant Source and BMP Summary Table

| Area | Activity | Pollutant Source | Pollutant | Best Management Practices |
|-------------------------------------|--------------------------------------|--|--|--|
| All | General Landfill Operations | Erosion | Sediment | Apply mulch on intermediate cover areas and stockpiles; Sedimentation basin; Pump down basin between storms; Soil tackifier for exposed cuts/fills; BMP's per NPDES permit (9-37S0055556). |
| Native Plant Nursery | Watering | Water runoff | Herbicides Fertilizer Loose soil/sediment | Use a computerized Water System; Closely monitor all hand watering |
| Minnesota Methane of San Diego, LLC | Cogeneration from Landfill Gas (LFG) | Cogeneration Buildings and Facility, compressor pumping station | Oil; Cleaning Agents; Glycol or anti-freeze products; Batteries; Grease; Dust, dirt, and debris; Landfill gas condensate | Store oil, grease, glycol and cleaning agent containers under cover where protected; Store batteries; Train personnel; train vendor contracted for waste oil/solvents/rags/filters/batteries/etc; Train vendor contracted for landfill gas condensate hauling and disposal offsite |
| City LFG/groundwater crew | Groundwater sampling | Groundwater purge water, air compressor | Purge water, air compressor fuel and oil | Dispose of purge water in the lined section of the landfill; Store compressor oil and fuel containers under cover where protected |
| Equipment Fueling | Fueling of Heavy Equipment | Diesel Fuel | Diesel Petroleum | Use a quick-fuel system with an aircraft grade nozzle; Use good housekeeping practices and berms; Train personnel |
| Hawthorne Machinery Company | Heavy equipment maintenance | Heavy equipment maintenance. Above ground waste oil tanks. Poor housekeeping or BMP's. Poor equipment servicing or | Diesel Petroleum based products. Hydraulic fluids. Cleaning solvents and thinners. Paint | Double-contain waste oil drum; Maintain good housekeeping practices; Use a vendor for all waste oils, solvents, oil filters, rags, batteries and other controlled products; Store batteries on an elevated platform; Train personnel; Use drip pans and absorbent swabs. |

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| | | maintenance. Equipment batteries and associated acids | products. Glycol or other antifreeze products. Equipment batteries. | |
| Superior Rock | Rock excavation and crushing operation | Sediment; Diesel fuel; Heavy equipment maintenance. Above ground waste oil tanks. Poor housekeeping or BMP's. Poor equip. servicing or maintenance. Equipment batteries and associated acids | Diesel Petroleum based products. Hydraulic fluids. Cleaning solvents and thinners. Paint products. Glycol or other antifreeze products. Equipment batteries. | Double-contain waste oil drum; Maintain good housekeeping practices; Use a vendor for all waste oils, solvents, oil filters, rags, batteries and other controlled products; Store batteries on an elevated platform; Train personnel; Use drip pans and absorbent swabs. BMP's per NPDES Permit (WDID No. 937S005166) |

SWPPP Review Checklist Inactive Landfills

Potential Pollutant Source and BMP Summary Table

| Area | Activity | Pollutant Source | Pollutant | Best Management Practices |
|------|---------------------------------|---------------------|-----------|--|
| All | General Landfill Maintenance | Erosion | Sediment | Apply mulch on all slopes and top decks; Conduct routine inspections to maintain proper drainage; Seed and plant drought resistant vegetation; Install/maintain BMP's per NPDES permits: S. Chollas 9-37S003312 Arizona St. 9-37S005768 Mission Bay 9-37S005784 S. Miramar 9-37S005785 |